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Contingency Management in the People's Republic of China

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The behavioral contingencies that have been implemented in the attempt by the People's Republic of China to achieve two of its national goals are described. The goals are the modernization and increased productivity of industry and a significant decrease in the birth rate. Changes from past practices in the industrial sphere involving a shift from noncontingent to contingent consequences are outlined. The use of a variety of consequences as a means of reducing the birth rate is described.

Some behaviorists have maintained an interest in extrapolating to entire societies principles of behavior that often have been derived from laboratory experiments. B. F. Skinner in particular has long been interested in the possibility both of analyzing extant societies in behavioral terms and in the design of utopian societies based on the premises and principles of radical behaviorism (Skinner, 1948, 1953, 1961, 1969, 1971, 1974, 1981). Other behaviorists have shared Skinner's interest in the analysis of societies (e.g., Holland, 1978a, 1978b).

Certain of Skinner's views about control and countercontrol in societies have been previously applied as a theoretical analysis of the People's Republic of China (China) under Mao Zedong (Barlow, 1981). There have, however, been far reaching changes in China since Mao's death in 1976 and the overthrow that year of the "Gang of Four," which marked the end of the turbulent and disastrous Great Proletarian Cultural Revolution (1966–1976). The purpose of the present article is to analyze in behavioral terms the efforts China's post-Mao leaders have made in two extremely important spheres: industrial productivity and birth control. The great importance of the agricultural sphere in China is acknowledged but is outside the scope of the present paper.

It is not the author's intent to present a detailed behavioral analysis of practices in China. What is offered, rather, is an example of two areas of social control which might be amenable to a comprehensive behavioral analysis if more reliable and direct observations of Chinese practices become possible. In reading what follows, it should be borne in mind that the described practices are embedded in complex ecological matrices. As a result of these considerations the drawing of facile generalizations about what is happening in China is, at best, risky.

Two major goals of China's leaders are to modernize industry and increase its productivity and to decrease significantly the birth rate. The first goal is part of the "Four Modernizations" launched in 1979. The purpose of the "Four Modernizations" is to "modernize agriculture, industry, national defense, science and technology by the end of this century so that China's economy might take its place in the front ranks of the world" (Xue, 1981, p. 234).

The goal of decreasing the birth rate is recognized as a prerequisite for achieving the "Four Modernizations" and is official national policy. This policy has even been incorporated into the 1982 Constitution (*The Europa Year Book 1983: A World Survey,* 1983).

Background

It can be argued that the contingencies to be described below are the result of the failure of exhortation by the Chinese

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leadership and of "education," broadly conceived. The Confucian notion that persons are greatly amenable to persuasion was not rejected by the Chinese Communists, even as they vilified "Confucianism." During recurrent "Maoist" or "Leftist" phases, the Chinese leadership emphasized exhortation, group solidarity, and what Whyte (1974) has called "political rituals." What the Chinese call "material incentives" were correspondingly deemphasized. Self-criticism and criticism by others have a long history in China (Barlow, 1981); and, while it may be true that persuasion was in the past backed by force and the threat of force (Freedman & Freedman, 1982), those "bad old days" presumably ended with the ouster of the Gang of Four. Pragmatism has replaced dogmatism, as exemplified by such oft-encountered slogans as "practice is the sole criterion of truth" and "truth from facts."

> We must test to see if our knowledge, as manifest in our line, principles, policies and plans, brings anticipated results, is accurate and corresponds to objective reality. Practice, knowledge, practice again, and knowledge again—this is the inevitable process by which we come to know objective laws. (Xue, 1981, p. 290)

Such a pragmatism seems quite congenial to radical behaviorism (Lamal, 1983).

China's leaders still, however, rely on persuasion and exhortation as one important means to control the behavior of the masses. While aversive control may be widespread (Butterfield, 1982) there seems to be a preference for persuasion, which, ironically, is a fundamental Confucian prescription. In striving to achieve the country's goals, Hu Yaobang, General Secretary of the Chinese Communist Party Central Committee, "stressed that the basic principles of this work is to educate the people through persuasion and not through compulsion and coercion" ("Hu on Ideological," 1983, p. 5).

While the use of persuasion and exhortation have a long history among the Chinese Communists, the systematic use of certain putative positive reinforcers has been sporadic. Such putative reinforcers as praise and being singled out as a model for others to emulate ("emulation campaigns") have been widely used for a long time. The widespread use of such "material incentives" as money, on the other hand, has been resurrected only with the abandonment of the "Left" line after the downfall of the Gang of Four. Indeed, one of the hallmarks of the Gang of Four and the other "Leftists" was their strong criticism of the idea of using "material incentives" as being part of the despised "capitalist road." The present leadership, however, has apparently concluded that the systematic and widespread use of such "material" consequences contingent upon certain behaviors is necessary for the achievement of the national goals.

The modernization of industry is one of the famous Four Modernizations. This modernization drive includes the goal of making China's industry more productive. The general economic goal is to quadruple the gross annual value of industrial and agricultural production by the year 2000, at which time "the production technology of the major industrial branches will match the current (late 70s and early 80s) level in economically developed countries" (Ren & Pang, 1983, p. 12).

In order to achieve the modernization of industry a number of obstacles must be overcome. Two major obstacles recognized by the Chinese leadership are the "iron rice bowl" (*tie fanwan*) and the practice of "everybody sharing food from the same big pot" (*chi daguofan*). Both of these are now condemned as "Left" mistakes that were promoted by the Gang of Four and, at least sporadically, by Mao. The "iron rice bowl" refers to the practice of state enterprises guaranteeing their employees lifelong employment irrespective of their job performance. In a broader sense it refers to the practice of the state in providing resources to its various enterprises irrespective of their performance (Wei & Chao, 1982). "Everybody sharing food from the same big pot" refers to the practice of paying workers equally, regardless of differences among them in terms of the quality or quantity of their work. This practice:

> results in workers in different state-run enterprises getting the same bonuses. It does not matter how well or poorly their particular enterprise might be managed, or even whether it makes a loss . . . in determining wage grades and promotion, it is invariably not the worker's contributions that are considered, but his political attitudes, his seniority and his financial obligations. (Xiang, 1982, p. 120)

This practice is now condemned as a mistake of "egalitarianism," and policies and practices have been instituted to replace it. The "iron rice bowl" has also come under attack. A start has been made in abolishing life-long tenure for cadres and state enterprises have been empowered "to fire those who often were absent from work without leave or adopted an extremely irresponsible attitude towards their work despite repeated admonitions" (Wang, 1983b, p. 4). This reform will be carried out gradually.

One need not be a behaviorist to recognize that the noncontingent reinforcement embodied in the "iron rice bowl" and "eating from the same big pot" might prevent China from modernizing its industry and increasing its productivity. The Chinese leaders who came to power after Mao's death and the ouster of the Gang of Four have recognized the problem and have moved to replace it with a system of contingent reinforcement.

The denigration of the so-called "material incentive" during the Cultural Revolution was accompanied by a decrease in people's living standards and productivity. By 1977, real wages had fallen 6.6 percent below the level of 1965. Productivity per worker in state-owned industrial enterprises only grew at an annual rate of 2.5 percent between 1966 and 1970, and decreased at an annual rate of 0.3 percent during 1971–1975 (Xiang, 1982).

While some of this decline in productivity was due to China's lack of advanced means of industrial production, the current leadership apparently realizes that much of it was due to the absence of sufficient "material incentive" to arouse the "enthusiasm of the workers."

There has now been a definite move away from the practice of noncontingent reinforcement exemplified by the "iron rice bowl" and "everyone eating from the same big pot." The current state of affairs is illustrated by the slogan "the more you work, the more you earn." One of China's leading economists, Xue Muqiao, outlined principles to be followed in the formulation of a wage policy (Xue, 1981, pp. 79–83).[1] One principle is that of providing more pay for more work and less pay for less work, while avoiding both wide discrepancies in wages and none at all. According to Xiang (1982), the ratio between the highest and lowest wages for urban workers is four to one. If the wages of the Party and government leaders and "higher intellectuals" are included, the ratio is approximately ten to one. Another principle listed by Xue is that people's income should be gradually increased in coordination with increases in production and labor productivity. Also, the new wage system should be accompanied by the establishment of better facilities for lightening people's household chores, "all governmental institutions and enterprises should run good public dining halls, living quarters, nurseries, clinics and other welfare facilities to ensure a worry-free devotion to work" (Xue, 1981, p. 82). According to Xue, the form that wages might take include time wages and piece wages supplemented by bonuses and subsidies for hazardous and arduous jobs. Provision is made for having piece wages based on the output of an individual or a group. Xue is of the opinion that with increasing mechanization and automation it will be increasingly difficult to set quotas for individuals and thus they will be set for groups in some cases. But for the present "it is still necessary to introduce piece wages for the individual on a wider scale. Any denial of their usefulness would be incorrect" (Xue, 1981, p. 83). China's leaders are apparently aware of the effectiveness of the ratio schedule of reinforcement as represented by piecework wages (Skinner, 1953, pp. 385–387) even if they have never heard of B. F. Skinner or behaviorism. According to Xue (1981), bonuses are also necessary, particularly as a supplement to time

[1] Chinese surnames are placed before individuals' first names.

wages. In Skinner's view (1953, p. 389) a bonus is usually classed as an emotional variable, predisposing the person favorably toward his work or his employer. The bonus may also act as a reinforcer and its effect is much greater if given on a variable-interval schedule as opposed to a fixed-interval schedule. It is not clear whether this significant difference is appreciated by the Chinese in their implementation of bonuses.

The current economic reform also extends contingencies involving delayed consequences to enterprises. Before 1979 the state industrial and commercial enterprises turned all their profits over to the state, while the state covered the losses of any of those enterprises. Now such enterprises will pay more taxes but will have control of their profits, determining how they are used ("Enterprises Are Liberated," 1983). The rules involved in such contingencies may function as discriminative stimuli for good management and productivity. The new approach has even been adopted by the First Troupe of the Beijing Opera Theatre (Giichi, 1983).

This new approach, called the "responsibility system," was first implemented with China's peasants (Gonzalez, 1982) and has now been extended to urban industrial and commercial enterprises (He, 1982; "New System Improves Industry," 1983). The responsibility system has a number of features that would seem to be advantageous from a behavioral viewpoint. Under the system, the rights and responsibilities of each position in an enterprise are clearly defined. Specific wages are assigned to each job, and the basis for the awarding of bonuses is specified. A general goal is to have more work be followed by more pay. The contingencies can take different forms, however:

> For example, bonuses to those who have overfulfilled the production targets, piece rate wages, floating wages (i.e., floating within a 20–30 percent of the basic wage), floating grades (i.e., whether one should go up one grade should be decided according to his work done in the year. Only those who have made great contributions for years on end can have their floating wage grades changed into fixed wage grades.) ("New System," 1983, p. 24)

A contract labor system has also appeared. Under this system of contracts between workers and employers, workers' pay is linked to their efforts as well as to how well the enterprise employing them is managed (Wang, 1983b).

The transition to a more productive set of contingencies has not always been smooth and has sometimes deviated from what its designers must surely have envisioned. This would hardly be surprising to anyone who has experience in applying principles of behavior in extralaboratory situations. Many obstacles typically prevent a perfect transition from the design to actual implementation of a behaviorally (or nonbehaviorally) based system in the "real world." Thus, it has been noted that:

> The meritocratic norm, "to each according to his work" is difficult to translate into concrete distributive rules. Different groups of employees disagree about the fairness of various distributive criteria. Informal patterns of group behavior often subvert the intentions of managers and policy-makers. And managers themselves hand out bonuses indiscriminately in a manner which enhances their own popularity but not productivity. (Shirk, 1981, p. 575)

Starting in 1979, three evaluative categories were used in determining wage increases: contribution, technical level, and work attitude. Translating these categories into specifics (presumably behavioral descriptions) and then determining the number of points earned by each individual in each category was apparently a difficult and time-consuming process (Shirk, 1981). The process reportedly involved a good deal of conflict among the workers and cadres involved, as each of the categories was spelled out in quantitative terms and the specific numbers that constituted each person's score were announced before group discussions began.

> The argument for the point system was that by making the criteria concrete so that everyone clearly understood the bases for selection [of those who would receive wage increases], it would eliminate quarreling, overcome factional sentiments, and maintain unity. Even with the point system the process of face-to-face evaluation was still so painfully divisive for some groups of workers that they abdicated responsibility for selection to leaders, reinstituted seniority criteria, or held secret rather than open votes for selection. (Shirk, 1981, pp. 580–581)

It is not clear to what extent these problems were due to the change from a system of noncontingent reinforcement to a system of contingent reinforcement or from defects in the new system itself. One of the hallmarks of behavioral technology is the continuing monitoring of innovations and the use of data thus obtained to make adjustments. The insistence of China's leaders that "practice is the sole criterion of truth" and the emphasis on "truth from facts" implies a willingness to make changes in the contingencies embodied in the new economic system when such changes are warranted.

The revival of the bonus system was also not without problems. Workers were quite reluctant to make discriminations among themselves, and found ways to revert to "egalitarianism" (Shirk, 1981). Subsequent reforms have tried to strengthen the contingency between productivity and bonuses. Since 1979 many enterprises have instituted a point system as the means of distributing their monthly bonuses. "The advantage of the point system is that it provides hard data; at the end of the month workers can see at a glance (*yi mu liao ran*) who should receive how much bonus. Bonuses are simply determined by point totals; there is no need for time-consuming, socially-corrosive group evaluation and no possibility of cadre favoritism" (Shirk, 1981, p. 586). The resemblance of this system to the behaviorist's token economy is clear. However, indiscriminate distribution of bonuses continued to be a problem (Zhao, 1981).

The drive to increase output has led to an enthusiasm for piecework among China's leaders. The critical element with respect to piecework is the quota of work or product to be produced and how it is set. This has been a source of conflict, with workers preferring low quotas and management preferring high ones. The payment of piecework-type bonuses has resulted in major problems of shoddy products and serious accidents as workers ignore safety rules in their eagerness to surpass their quotas (Shirk, 1981). Piecework-type bonuses have also resulted in divisiveness among workers, with older workers resentful that they cannot meet the pace set by younger workers. Support workers and administrative personnel who cannot earn piecework bonuses nonetheless find their workload increased without any increase in pay.

Such problems attendant on the individual piecework system are probably responsible for a reportedly growing interest in collectively-based bonuses for surpassing quotas. Under this system:

> The work group is assigned a quota which establishes how many man-hours it should need to produce a certain quantity of output. If the group overfulfills the quota, cadres and support workers share the bonus (often according to a job-related point system) with the main line production workers. Economic policy-makers hope eventually to popularize this method, which has had great success in the Shanghai textile industry. (Shirk, 1981, p. 589)

It is not yet clear how successful the drive to make China's industry more efficient and productive will be. One noteworthy characteristic of the drive, however, is the attempt to ground it on an empirical base. Reforms are often tried out in one area or in a certain number of enterprises, data are collected and then a decision is made as to whether or not these reforms should be adopted on a wider or nation-wide scale. This process can involve what seem to be experiments or at least quasi-experiments. One reform involved more than 6,000 state enterprises (Wang, 1983a).

It has been found that granting enterprises full responsibility for their profits and losses has resulted in greater income for the enterprises as well as the state (Wang, 1982). There is, however, a recognition that the need for changes and refinements is an ongoing one. As Xue (1981) put it, "Practice, knowledge, practice again, and knowledge again" (p. 290).

Population Control

China's leadership realizes that the success of the drive for modernization hinges on success in reducing the nation's birthrate. Formidable obstacles must, however, be overcome. There is a long tradition in China strongly favoring the

practice of having many children, exemplified by the traditional saying, "More is better." A concomitant tradition is that having sons is much preferable to having daughters. In the past this preference was so strong that infanticide of females was far from unknown. Parents preferred sons because the sons went to work at an early age and contributed to the household's income, or at the least eased the father's grinding burden of labor. Furthermore, when their parents were too old to work, sons had an inviolable duty to support them. These traditions still exist, particularly among the 80% of the population that lives in rural areas. The program known as the "five guarantees" (*wu bao hu*) was introduced to care for elderly people without children, particularly those without a son. The guarantees are for food, clothing, medical care, housing, and burial expenses. Most Chinese interviewed by Brown in 1980, however, stated that the rural people did not have much faith in the program; they still wanted a son (C. Brown, personal communication, June 15, 1983). Reports still appear of female infanticide and of husbands mistreating their wives who gave birth to girls ("Female Infanticide Punishable by Law," 1983; Wu, 1983; Xiang, 1983). "The idea that 'men are superior to women' has come to life again among some people" (Xin, 1983, p. 4).

According to the national census taken on July 1, 1982, mainland China had a population at that date of one billion, eight million. This constituted approximately 22% of the world's population, and is a net increase of 460 million since the Communists took control of the country in 1949 (Ren & Yue, 1983). In what follows it must be borne in mind that demographic data from China have often been characterized as incomplete and unreliable (e.g., Aird, 1982); nevertheless a definite picture of the problem emerges.

One variable compounding the population problem is the composition of the population. There was a baby boom in China in the 1950s and another in the 1960s. Those born during these booms are at or near their peak fertility. Half of the population is under age 21, and it is expected that in each of the next 18 years an average of 20 million persons will reach marriageable age (Qian, 1983). Other data contribute to a picture of the dimensions of the problem China faces. Sixty-five percent of the population is under 30, and according to sample surveys, 38.6% of the population is 15 and under (Tian, 1981).

A growing population is also cause for concern because of the necessity of finding jobs for everyone of working age. This involves finding employment for more than 23 million young people every year (Ren & Yue, 1983). An additional problem is is the fact that while China is a vast country, two-thirds of it is mountainous, desert, or semidesert. There is an average of only 0.3 hectare of farmland for each able-bodied peasant.

Population Goals

Faced with this acute population problem, China has made family planning part of its official national policy (Qian, 1984). The mid-term goal is to limit the country's population to one billion, two hundred million by the end of this century (Liu, 1981; Qian, 1983). In order to achieve this goal, the one-child campaign was begun in 1979. The goal of this campaign is starkly simple: married couples should have no more than one child. This would be accomplished in two stages. The goal of the first stage has been to eliminate all births of three or more children and to persuade some families to have only one child. The goal of the second stage is to reduce the natural increase rate of the population (births minus deaths) to zero as soon as possible by extending the one-child norm (Chen & Kols, 1982).

To achieve the population goals the government widely publicizes all contraceptive methods, particularly the low-cost effective methods of the IUD and sterilization. The government tries to make contraceptives easily available, and abortion is readily available and is free of charge upon request, without requiring the husband's consent (Chen & Kols, 1982). Late marriage has also been

strongly advocated, but the marriage law of 1980 only raised the minimum age from 18 to 20 for women and from 20 to 22 for men. The leadership apparently feared that raising the ages higher would result in widespread premarital sex and illegitimate childbearing (Chen & Kols, 1982), which is apparently what had happened when the marriage ages were even higher in the 1970s (Tien, 1983).

Chen and Kols (1982) characterize the one-child family goal as a compromise between the government's goal of zero population growth and China's realities.

> To reduce the natural increase rate to zero in a decade or two would mean that many people could not have any children. China's leaders have recognized the impossibility of such a plan, since universal marriage and reproduction is culturally mandated and economically important to individual households. The goal of a one-child family is a calculated risk; the government believes that it is the most extreme reduction in fertility tolerable to the people. (Chen & Kols, 1982, p. 600)

Contingencies

The use of various consequences as a part of the one-child campaign varies widely from province to province and even within provinces (Chen & Kols, 1982). Thus all of the benefits listed below would probably not be available at any given locale.

After the birth of their first child, couples can obtain a "one-child certificate" if they pledge to have no more children. Possession of such a certificate entitles the parents and their child to a variety of benefits (Chen & Kols, 1982). *Income:* A monthly stipend for parents in urban areas, ranging from 5 to 8 percent of the average worker's wage. The stipend continues until the child reaches age 14. In rural areas parents may receive as much as an extra month's work points a year until the child reaches age 14. In rural communes at least before the institution of the responsibility system, the child was to receive an adult's grain ration and was to count as 1.5 to 2 persons in the allocation of private farming plots. *Housing:* One-child families might be given living space equal to that for a two-child family. In urban areas they would be given preferential treatment when applying for public housing. *Health:* Two weeks of extra paid maternity leave, as well as highest priority in receiving health care for the child. *Old age:* In urban areas a supplementary pension over and above that provided by the law. In rural areas a guaranteed standard of living equal to or higher than the local average. *Child's education:* Highest priority for admission to nurseries, kindergartens and school programs. Exemption from tuition costs and extra expenses from primary school through senior middle school. *Child's employment:* Highest priority in receiving desired job assignments when the child is grown.

Because of the strong traditional Chinese desire for a son to provide for parents' support in their old age and to continue the family line, the government is attempting to change the contingencies involved for the one-daughter family to encourage parents to stop at one child if it is a girl. Traditionally a daughter was only a temporary asset because she went to live with her husband's parents after marriage and did not contribute to the welfare of her own parents when they grew old. Now officials are encouraging husbands to move in with their wives' parents when they marry an only daughter. Daughters are also now just as legally responsible for their parents' welfare as are sons. Daughters may now also take over the father's job when he retires (Chen & Kols, 1982).

Concurrent with the use of what may be functioning as discriminative stimuli and positive reinforcers is the use of presumed punishers and coercion in the one-child campaign. Just as with the use of positive reinforcers, there is wide local variation in the punishers used. Among the most common are the following:

> Parents who break their pledge by having a second child are required to return all the stipends or work points they have received. If any couple has a third child, their monthly wages are reduced by 10 percent or more, and they must remain in housing meant for a 2-child family. Families with more than two children do not receive subsidies when they are in financial difficulties, and they are charged for the pregnant mother's medical care and the extra child's grain ration .... The child cannot enroll in any

cooperative medical care scheme and receives no preference in school and job assignments. (Chen & Kols, 1982, p. 603)

In Aird's (1982) view, coercion is a persistent feature of the Chinese birth control drive, even though it has been officially disavowed a number of times. According to Aird the coercion is a result of continuing popular resistance in many places to the birth control campaign and of the pressure on the responsible cadres to show results. There have been reports of forced abortions for women (Aird, 1982) but no reliable data as to the extent of the practice.

Effectiveness

In trying to gauge the effectiveness of the one-child campaign one should be aware of the lack of complete and reliable population data in China (Aird, 1982; Bianco, 1981; Tien, 1980). Reports that include references to the birth control campaign often include no data at all. It is apparent, however, that the campaign has met with mixed results. Population growth during 1981 apparently exceeded the planned target, and the problem is more acute in the rural than in the urban areas (Chen & Kols, 1982; "Controlling Population Growth," 1982; Qian, 1984; Zhao, 1981). While the results of the campaign have been described as "impressive" (Chen & Kols, 1982), birth control is still a matter of great urgency to the country's leadership (Qian, 1983).

Several factors account for the less than total success of the campaign. One is the large number of people who have recently reached marriageable age. Another is the institution of the full responsibility system in the countryside. Under this system households may retain as profit any above-quota agricultural product they produce. Parents who had more children would have more help in the fields, more earning power for the household, and support in their old age (Chen & Kols, 1982). Measures, however, have been taken to reconcile birth control with the full responsibility system:

> In planning areas the birth planning norms are now built into the households' annual production contracts. These contracts now stipulate that couples with one or more children will use an effective birth control method . . . and will have an abortion if contraception fails. Newlyweds without children pledge not to have a child before receiving a birth quota . . . . When a pregnant woman refuses to have an abortion or has a child in violation of the contract, her family's farm plot can be taken away and other types of economic sanctions applied. (Chen & Kols, 1982, p. 607)

Also, the bonuses of the local cadres have been made contingent on their units' birth planning performance as well as on agricultural production. In some areas more land is also allocated to one-child families, while in other areas the production quotas of such families have been reduced ("Controlling Population Growth," 1982).

Because of these adaptations the full responsibility system reportedly has had no ill effect on the birth planning efforts in certain provinces. The most successful of the local adaptations will probably be used as models for other areas, and innovations found to be successful will be diffused throughout the country (Chen & Kols, 1982).

The contingencies that have here been described are part of a fundamental change that has taken place in China since the death of Mao and the downfall of the Gang of Four. The change has been from dogma to pragmatism, from the encouragement of continual revolution to the encouragement of the Four Modernizations, from the slogan "Better Red than expert" to "Both Red and expert."

The post-Mao Chinese leadership has also been attempting to establish contingencies that will contribute to "the good of the culture" (Skinner, 1971, p. 134). One class of contingencies consists of those that result in greater industrial productivity and efficiency. Another class consists of those that result in a lowered birth rate. A logistical problem involves the time lapse between the occurrence of the desired behaviors and occurrence of the reinforcers. To be successful, the planners will have to ensure that reinforcement follows the desired behaviors as soon as possible, at least in the early stages of their contingency management.

The success of the current drives also

hinges on whether the incentives currently in use are actually functioning as positive reinforcers. There is some evidence that they are. With respect to the one-child campaign, however, a question is whether such consequences as money and privileges for an only child will be sufficiently strong as alternative reinforcers (Schwartz & Lacey, 1982) to the possible reinforcement of having more children, even if the latter is combined with punishment for having more than one child.

Perhaps the most important determinant of the likelihood of success as the Chinese strive to attain their goals is the willingness of the current leadership to attempt innovations and then to select the most successful ones and diffuse them throughout the society. This approach is congruent with Skinner's (1953) view that, "perhaps the greatest contribution which a science of behavior may make to the evaluation of cultural practices is an insistence upon experimentation" (p. 436). Mistakes have been made and will doubtless be made in the future. It is often very difficult to ensure that programs are adequately carried out at the local level. The system is far from perfect, but the general approach of basing reforms on data and of having an empirical basis for choosing among alternative courses of action might well serve as a model for other societies, including our own (Stolz, 1981). While the Chinese leadership may not have known, or cared, about Campbell's (1969) admonition to conceive of social reforms as experiments, their approach is clearly consistent with such a strategy.

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